ILT570-VIS
Spectroradiometric Measurement Systems

From Development to Production, Measure with Confidence.

ILT570-VIS

At A Glance:

- Easy to Use
- User Friendly Software*
- Spectral Range: 400 nm to 800 nm

The ILT570VIS Mini Spectroradiometric Measurement Systems are ideal for testing and measurement of visible light sources. We offer seven options for measuring light sources from 400 nm to 800 nm. Each Spectroradiometer System includes our visible mini spectrometer and optical fiber, an optical measurement head for spectral irradiance, spectral radiance, or spectral flux, a stand, SpectrILight III control software & DLLs, and a carry and storage case.

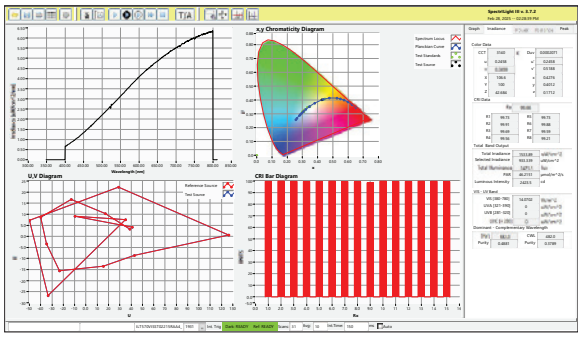
These Spectroradiometer Systems have been fully characterized and are calibrated for their spectroradiometric response following ISO 17025-certified processes, and supported by global recalibration centers in North America, Europe, and China.

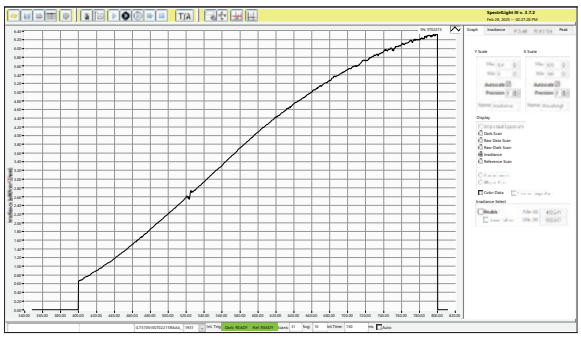
UV VIS NIR Spectroradiometers for measuring:

- Spectral Irradiance, Irradiance, Illuminance and Color
- Spectral Radiance, Radiance, Luminance and Color
- Spectral Flux, Optical Power, Lumens and Color

Ideal for:

- Product Development
- Inspection
- Quality Control
- Performance Validation
- Production





*Computer not included

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Specifications

Spectroradiometers	ILT570VIS-RAA4	ILT570VIS-W/A2	ILT570VIS-W5E	ILT570VIS-R2	ILT570VIS-R3	ILT570VIS-INT50	ILT570VIS-INT150
Type	VIS Spectral Irradiance	VIS Spectral Irradiance	VIS Spectral Irradiance	VIS Spectral Radiance	VIS Spectral Radiance	VIS Spectral Flux	VIS Spectral Flux
Spectral Range of Spectrometer	350 nm to 810 nm	350 nm to 810 nm	350 nm to 810 nm	350 nm to 810 nm	350 nm to 810 nm	350 nm to 810 nm	350 nm to 810 nm
Spectral Range of Calibration	400 nm to 800 nm	400 nm to 800 nm	400 nm to 800 nm	400 nm to 800 nm	400 nm to 800 nm	400 nm to 800 nm	400 nm to 800 nm
Radiometric Dynamic Range (400 - 800 nm	1.01E-02 to 2.7E+02 W/cm²	3.82E-02 to 1.03E+03 W/cm²	1.78E-02 to 4.79E+02 W/cm²	1.41E-03 to 3.77E+01 W/cm²-sr	2.71E-02 to 7.28E+02 W/cm²-sr	6.65 E-06 to 1.78 E-01 W	6.02 E-05 to 1.62 W
Luminous Flux Range for 3200K QTH						0.003 to 47 lumens	0.02 to 400 lumens
Illuminance Range	25 to 150k lux	100 to 600k lux	50 to 250k lux				
Luminance Range				1.0 to 2.0 E+04 cd/m²	2.0 to 2.0 E+04 cd/m²		
Integration Time Range	3.8 ms - 6 sec	3.8 ms - 6 sec	3.8 ms - 6 sec	3.8 ms - 6 sec	3.8 ms - 6 sec	3.8 ms - 6 sec	3.8 ms - 6 sec
Spectral Resolution	2.2 nm	2.2 nm	2.2 nm	2.2 nm	2.2 nm	2.2 nm	2.2 nm
Wavelength Accuracy	0.9 nm	0.9 nm	0.9 nm	0.9 nm	0.9 nm	0.9 nm	
Stray Light Rejection	2 AU	2 AU	2 AU	2 AU	2 AU	2.3 AU	2.3 AU
Fiber Length	1 m	1 m	1 m	1 m	1 m	1 m	1 m
Fiber Connections	SMA-905	SMA-905	SMA-905	SMA-905	SMA-905	SMA-905	SMA-905
Optical Heads	RAA4	W/A2	W5E	R2	R3	INT50	INT150
Input Configuration	Right Angle	Parallel	Parallel	Radiance/Luminance Optic w/2 Deg FOV	Radiance/Luminance Optic w/2.8 mm spot size at 50 cm	Sphere Entrance Port	Sphere Entrance Port
Reference Plane	Front Surface	Front Surface	Front Surface			Sphere Entrance Port	Sphere Entrance Port
Active Sensor Area	0.27 in. (6.9 mm) dia.	0.598 in. (15.2 mm) dia.	0.157 in. (4 mm) dia.	0.383 in. (9.7 mm) dia.	0.59 in. (15.0 mm) dia.	0.28 in. (7 mm) input port	1.5 in. (38 mm) input port
Optical Head Dimensions	0.61 in. (1.54 cm) dia. by 0.44 in. (1.12 cm) tall	1.65 in. (4.19 cm) dia. by 1.29 in. (3.28 cm) tall	1.25 in. (0.64 cm) dia. by 0.79 in. (2.0 cm) long	1.54 in. (4.19 cm) dia. by 1.46 in. (3.70 cm) tall	1.98 in. (4.27 cm) base dia., 1.20 in. (3.05 cm) lens dia. by 2.40 (6.10 cm) tall	2 in. (5 cm) dia. integrating sphere with 0.27 in. (0.7 cm) entrance port and 0.5 in. (1.27cm) near cosine fiber port	6 in. (15.24 cm) dia. integrating sphere with 3 ports, 1.5 in. (3.8 cm) entrance port, 0.5 in. (1.24 cm near cosine fiber port, and 1 in. (2.54 cm north pole port with port plug
Spectrometer Dimensions HxWxL	1.65 in. (42 mm) x 1.57 in. (40 mm) x 1.06 in. (27 mm)	1.65 in. (42 mm) x 1.57 in (40 mm) x 1.06 in. (27 mm)	1.65 in. (42 mm) x 1.57 in (40 mm) x 1.06 in. (27 mm)	1.65 in. (42 mm) x 1.57 in (40 mm) x 1.06 in. (27 mm)	1.65 in. (42 mm) x 1.57 in (40 mm) x 1.06 in. (27 mm)	1.65 in. (42 mm) x 1.57 in (40 mm) x 1.06 in. (27 mm)	1.65 in. (42 mm) x 1.57 in (40 mm) x 1.06 in. (27 mm)
Spectrometer Weight	70 g	70 g	70 g	70 g	70 g	70 g	70 g
Sphere Coating						Spectraflect®	Spectraflect
Mounting	1/4-20 mounting thread with tripod	1/4-20 mounting thread with tripod	1/4-20 mounting thread with tripod	1/4-20 mounting thread with tripod	1/4-20 mounting thread with tripod	1/4-20 mounting thread with tripod	1/4-20 boss, 4 in. (10 cm) post, 4 in. (10 cm) post holder, and 6 in. x 6 in. (15 cm x 15 cm base)
Calibration	Spectral Irradiance Response	Spectral Irradiance Response	Spectral Irradiance Response	Spectral Irradiance Response	Spectral Radiance Response	Spectral Flux Response	Spectral Flux Response
Storage and Carrying Case	Included	Included	Included	Included	Included	Included	Included
Software*	SpectrILight III	SpectrILight III	SpectrILight III	SpectrILight III	SpectrILight III	SpectrILight III	SpectrILight III

* Computer Specifications:
- A CPU or laptop with 1GHz processor, 1GB of RAM, 256GB hard drive, and a screen resolution of 1024 x 768
- Operating system: Windows 11 or later
- Microsoft .Net Framework 4.5 or later needs to be installed and enabled

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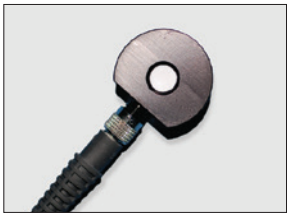
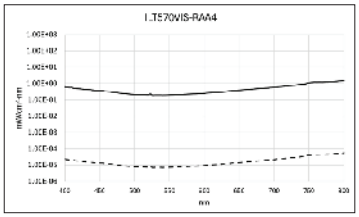
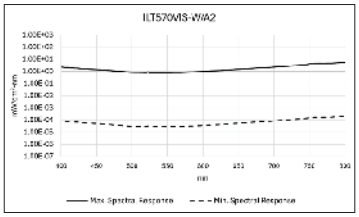
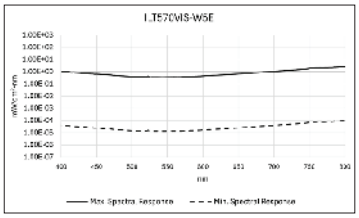
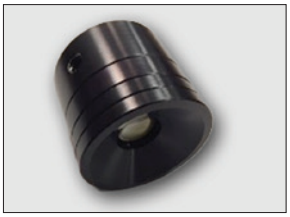
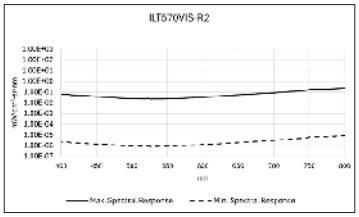
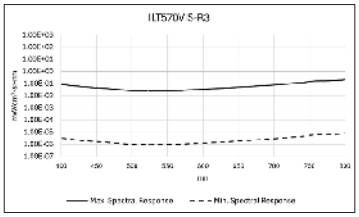
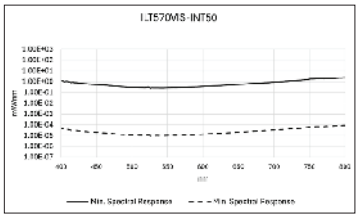
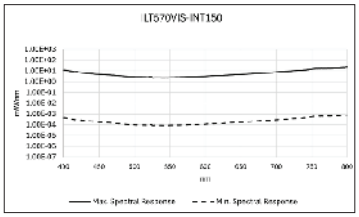
Optical Heads and Spectroradiometer Measurement Ranges

RAA4 Right-Angle Adapter/Diffuser Head with mini-integrating sphere for measuring spectral irradiance, total irradiance, and spectral characteristics of light sources.		
W/A2 Diffused Quartz Head with SMA adaptor for measuring spectral and total irradiance, illuminance, color parameters, and spectral characteristics of light sources.		
The W5E miniature cosine correcting diffuser with a SMA905 fiber adaptor for measuring spectral and total irradiance, illuminance, color parameters, and spectral characteristics of light sources.		
R2 Optical Head with an average field of view of 2 degrees for measuring spectral and total radiance, luminance, color parameters, and spectral characteristics of extended light sources.		
R3 Small Spot, 500 mm fixed distance Optical Head for measuring spectral and total radiance, luminance, color parameters, and spectral characteristics of extended light sources.		
INT50 5 cm (2″) Integrating Sphere for measuring forward and total spectral flux, power in watts, and spectral characteristics.		
INT150 15 cm (6″) Integrating Sphere for measuring forward and total spectral flux, power in watts, and spectral characteristics.		

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